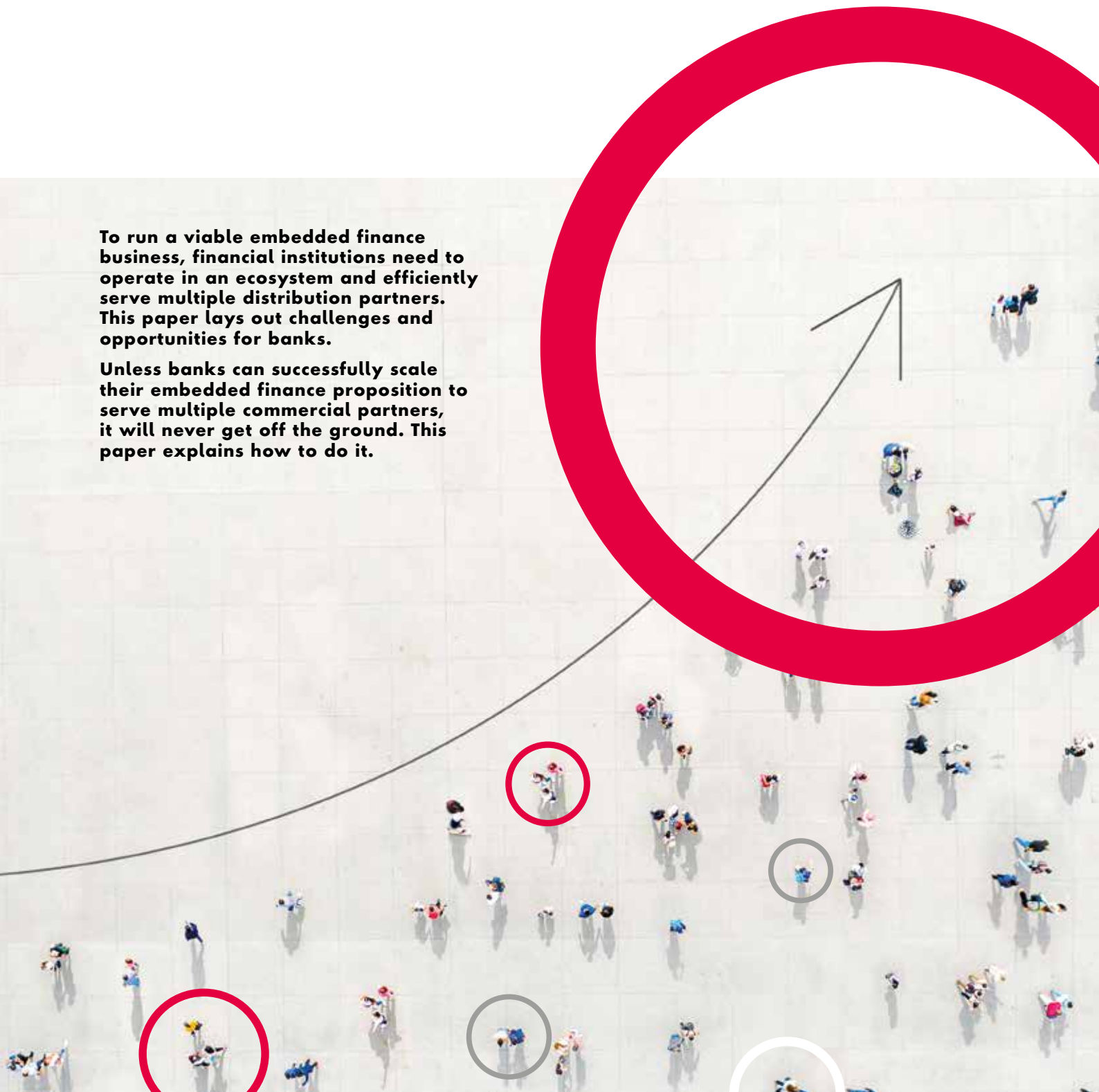
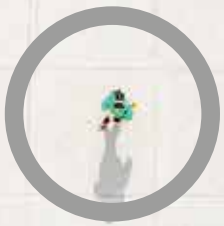


# How to make embedded banking work – at scale

**To run a viable embedded finance business, financial institutions need to operate in an ecosystem and efficiently serve multiple distribution partners. This paper lays out challenges and opportunities for banks.**

**Unless banks can successfully scale their embedded finance proposition to serve multiple commercial partners, it will never get off the ground. This paper explains how to do it.**





# Introduction

Embedded finance is on the march. Over the past few years, banking has spread further beyond banks and has been progressively integrated into a multitude of other, non-financial customer journeys.

Financial services, especially payments and credit products such as buy-now-pay-later (BNPL), have become standard elements of the retail e-commerce experience. In commercial environments, payments and other services such as revenue-based lending or trade finance are now integrated into digital marketplaces or ERP software so that users do not need to switch into their online banking portal. Retail customers and companies are consuming financial services alongside non-financial products and services with no visible join.

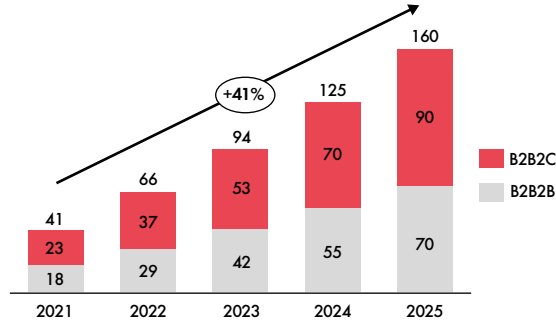
It is, of course, important to recognize that this concept is far from new. More traditional partnership distribution models such as co-branded credit cards and point-of-sale finance have been around for decades. But the relentless march of commerce and services into digital channels has given this established idea fresh relevance and momentum. The degree to which finance can be integrated into digital journeys is unprecedented and this allows finance to play its central, enabling role more effectively than ever. But it also poses new challenges for banks as they seek to engage with consumers and build their business in the digital economy.

The great advantage of embedded finance is that it brings banking services to where the customer is, creating simple, linear journeys that can be completed without opening a banking app or website, or inputting card details. Seamless journeys like this offer consumers and professionals an important value-add in terms of user experience and efficiency. There are major advantages for the providers as well. In e-commerce environments, embedded finance functions as a sales enhancement tool that increases propensity to purchase and delivers higher basket values and reduced dropout rates. For commercial service providers it brings opportunities to access additional income streams through revenue sharing between the partners or increase the attractiveness of a software proposition.

**EMBEDDED FINANCE REVENUES WILL DISPROPORTIONATELY GROW OVER THE NEXT FEW YEARS**

**Global embedded banking projections**

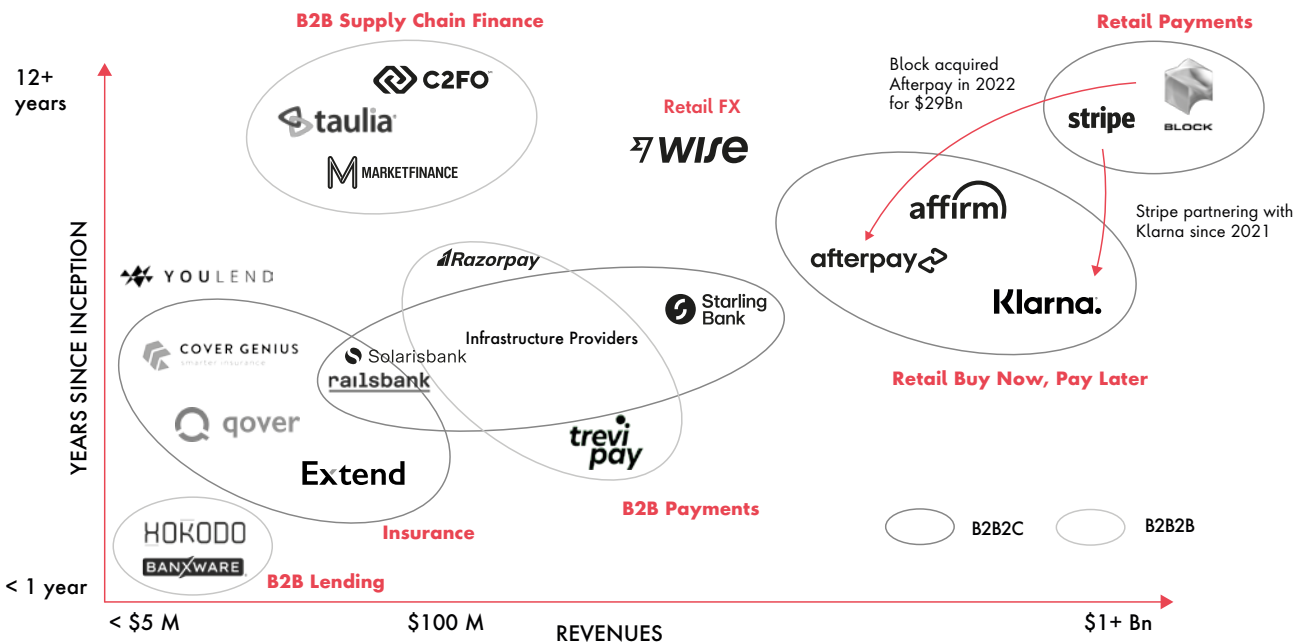
Total product revenue, \$Bn



Sources: Publicis Sapient Analysis, BCV, BIS, Lightyear Capital, McKinsey & Co., BCG.

It is hardly surprising, therefore, that growing interest in embedded finance is translating into predictions of rapid adoption. Although forecasts vary, annual growth of 40%+ in flows of embedded finance over the next few years is around the middle of the range we see. The early leaders in embedded finance tend to be digital-native challengers – fintechs, many of which have historically faced less regulatory scrutiny than banks. The areas in which they have achieved the greatest scale – payments and BNPL – provide a map of where embedded finance has advanced furthest to date. In broad terms, whilst it gained its first foothold in retail, commercial propositions are now gaining momentum, while in both areas payments were the first major use case followed by lending and working capital finance.

**GROWTH OF PLAYERS IN EMBEDDED FINANCE BY OFFERING TYPE**



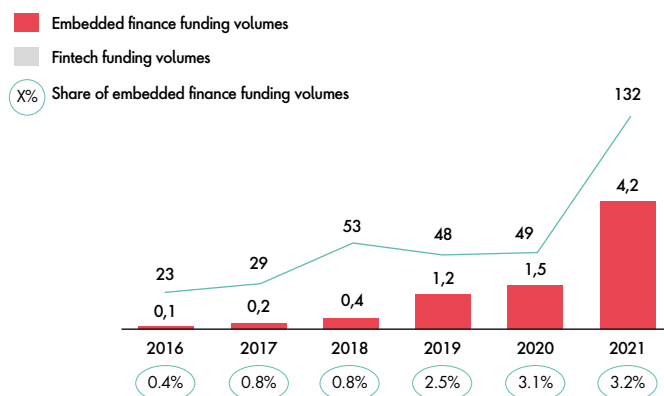
Source: Publicis Sapient Analysis



“Although fintechs currently dominate the conversation about embedded finance, banks are starting to engage, particularly in retail BNPL”

The share of venture capital funding for fintechs that is flowing into embedded finance is also growing – in 2018, the share was 0.8% but by 2021 that had quadrupled to 3.2%, thanks in part to the boost e-commerce received during the pandemic. And although fintechs currently dominate the conversation about embedded finance, banks are starting to engage, particularly in retail BNPL, while in the commercial space, payments, cash management and working capital propositions are also emerging. This trend will gather pace as banks build out their embedded finance capabilities and broaden the range of services they can integrate into other companies’ propositions.

**VC INVESTMENT VOLUMES IN EMBEDDED FINANCE AND FINTECH OVERALL, 2016 TO 2021, \$BN**



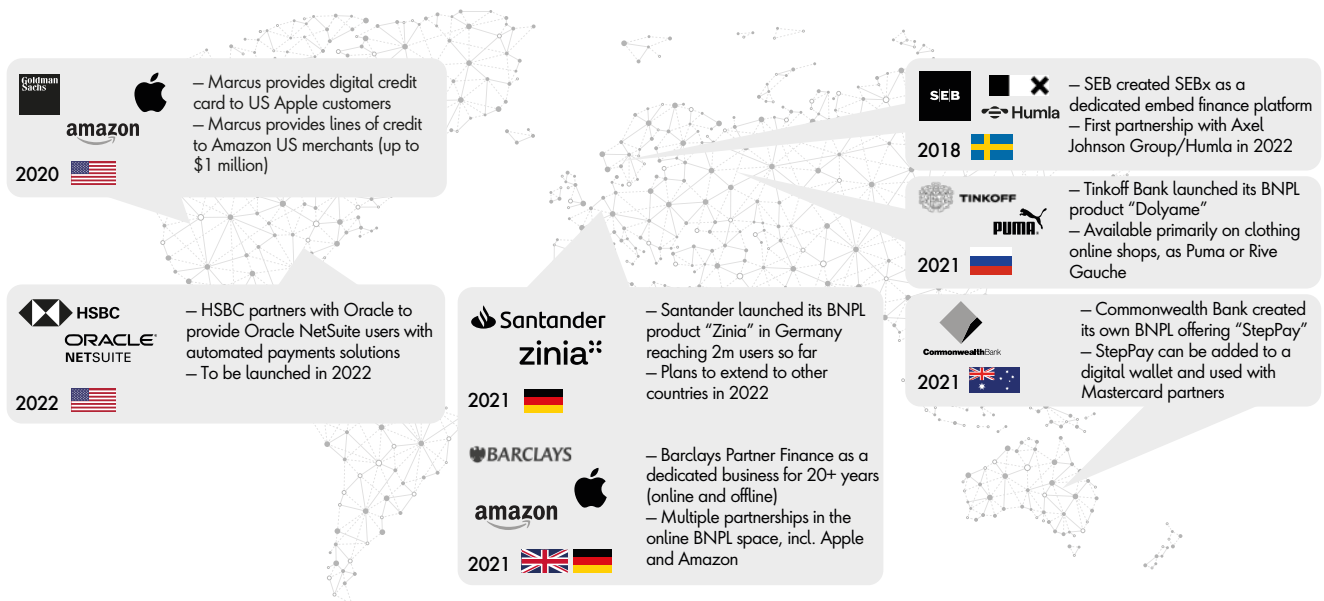
Sources: CBS Insights, PitchBook Data

# The opportunities for banks in embedded finance

There are two basic models for embedded finance that banks must evaluate, which are not mutually exclusive. **In the first, the provider owns both the non-financial and the financial elements of the customer journey.** Consumers can both choose purchases and pay for them, using credit if required, by dealing with the same counterparty. Probably the best-known example of this model is the Chinese “SuperApp” WeChat. The market power of successful “super-apps”, however, is such that the model is unlikely to be permitted to become dominant in Western economies due to competition concerns. However, players like Klarna offer an example of a blended approach, in which the company enables consumers to shop within the app and use its BNPL finance to pay for their purchases, while also embedding its BNPL service within hundreds of other companies’ e-commerce propositions.

**The second, more conventional model involves a partnership between a provider of non-financial products or services and one or more finance providers, which embed their financial services within the non-financial proposition.** The partnerships between Barclays – an experienced player in partner financing – and companies such as Apple and Amazon are classic examples of this model, which is designed to deliver an improved customer experience that will help the non-financial partner to accelerate their growth.

## BANKS HAVE RECOGNIZED THIS OPPORTUNITY AND EARLY MOVERS HAVE POSITIONED THEMSELVES - STARTING WITH BNPL PLAYS, WITH WHOLESALE PROPOSITIONS





Both these models are establishing themselves in the market and both have implications for banks, regardless of the approach they choose to embedded finance. In the first, they can expect to see their competitive set widen with the entry of newer players, which may or may not be financial services specialists but have built their proposition with modern tech infrastructure and a laser focus on customer experience. The more conventional, partnership model offers opportunities for banks to connect with more potential customers via their partner's distribution channels. But it also leaves them exposed to the risk of being disintermediated and losing their direct relationship with the end-customer.

It is critical, therefore, that banks decide what benefits are open to them by embracing embedded finance. Are they willing and able to adopt the first model and move into the e-commerce space or offer their own ERP, accounting or expense management solutions? And if they prefer the more conventional partnership model, are they content to operate as an anonymous white-label provider of financial infrastructure and services to partners that own the front-end customer relationships? Or do they intend to use embedded finance as a way to place the bank's brand in front of customers at the point of purchase and attempt to convert these contacts into direct banking relationships encompassing a wider range of their products?

“Banks have several potential commercial strategies for embedded finance. Whichever they choose, however, a key challenge will be to scale the proposition quickly and efficiently.”

The answers will depend on the banks' strategic priorities and specific capabilities, especially in digital product development – the process of designing and building new products and services in-house, integrating third-party fintech capabilities into the proposition and opening up the bank's existing back-end infrastructure and services so that they can be easily consumed by partners. But much will also depend on the balance of power between the bank and the brands with which it forms partnerships. The ability to design an embedded proposition that delivers clear value to the partner by helping it reach its business goals will have an obvious bearing on the outcome.

In effect this leaves banks with several potential commercial strategies for embedded finance. Whichever they choose, however, a key challenge will be to scale the proposition quickly and efficiently so that they can onboard large numbers of new clients smoothly and handle high transaction volumes. And at the same time they must also meet the requirements of multiple commercial partners with different technology profiles and shorter update and release cycles than most banks are used to. Unless they can scale the proposition efficiently while also remaining extremely partner-centric, the economics of embedded finance is unlikely ever to become an attractive proposition from the bank's perspective.

It is therefore essential to unpick the key capabilities that underpin embedded finance propositions and identify where the bank can realistically expect to play. We can visualize the partnership-based model of embedded finance as a series of layers, each comprising a set of capabilities required to deliver the proposition effectively. The commercial partner hosts the customer journey and has the primary relationship, while beneath that are the financial layers that support the embedded finance proposition – product manufacturing, access to banking infrastructure, balance sheet and regulatory permissions, which are provided by a bank or in some cases a fintech.

## UNDERPINNING EMBEDDED FINANCE MODEL IS A MODULAR CAPABILITY STACK

### Key layers

Layers	Description	Strategic focus	Examples
<b>Distributor/ Partner</b>	Has an existing customer base and creates the experience, incl. how financial services are embedded into its customer and supplier journeys	Create attractive propositions by blending financial and non-financial products	amazon, ORACLE, JOHN LEWIS PARTNERSHIP, shopify
<b>API layer</b>	Provides APIs so that financial services can be distributed in a compliant, resilient and operationally effective way - often "multi-tenanted" so that multiple partners can consume services from the same APIs	Zero in on convenience to embed financial propositions in ever-changing journeys fast	PLAID, tink, FINASTRA, Solarisbank, Synapse
<b>Financial product manufacturer</b>	Designs and builds the financial products to be proposed to the end customer through the partner	Create and refine products that cater to the blended customer propositions	railsbank, Solarisbank, MARQETA
<b>Banking infrastructure provider</b>	Provides the underlying banking processes and capabilities required to provide the financial products	Optimise for speed, risk, cost	railsbank, Solarisbank
<b>Regulated entity/Balance sheet provider</b>	Is the regulated financial entity which books the embedded financial products onto its balance sheet and carries the associated exposure	Manage risk/capital and maintain license	Wholesale funding providers

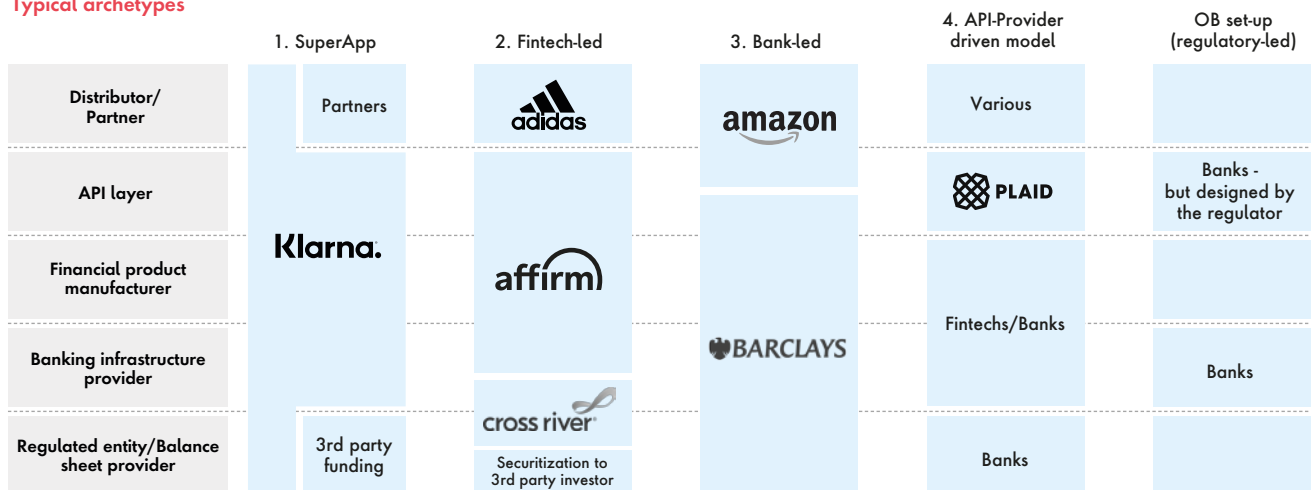
Incumbent banks

Sitting between the partner's customer journey and the banking products is a digital bridge – the API layer. This enables fast and convenient embedding of banking services into the non-bank partner's digital platform that hosts the customer journey. The API layer allows banking services to be piped easily and quickly into multiple different distribution partners' online environments, enabling transactions to happen seamlessly. It must also support the servicing needs of the partners, ensuring that the ongoing costs of embedding services remains low. Crucially, well designed banking APIs remove the need to build separate bespoke solutions for each partnership and therefore help the bank to scale its embedded finance offering efficiently. Although incumbent banks can play in this layer, in practice many of the leading API layer providers are non-bank fintechs. These fintechs often aggregate services from multiple banks and focus solely on facilitating the needs of non-banking partner.

If we then visualize the various embedded finance models we see in the market, in terms of the layers discussed above, the differing combinations of commercial partners, banks and fintechs become clear – as do the complex competitive dynamics. Opportunities for banks vary across these models, which range from the blended model operated by Klarna through ones in which either a fintech or a bank dominates the partnership with the non-financial player, and on to those in which an API layer provider connects multiple finance providers with multiple non-finance partners in a marketplace-type solution.

## HOW BANKS CAN TAKE DIFFERENT ROLES IN THE EMBEDDED FINANCE STACK

### Typical archetypes



There is a history of API layer providers disrupting value chains outside financial services with competitive and compelling propositions. For example, in telecoms the cloud communications company Twilio acts as an API aggregation layer for partners that want to access telecoms services. Twilio owns no telecommunications infrastructure but by focusing on improving its partners' integration experience, it has become a leading provider of communications services.

API companies like Twilio fill a gap in markets where integration costs are a barrier to embedding. By focusing on speed, convenience and stability of integration, these API companies become hubs for multiple partners. Plaid has successfully applied the Twilio model to the financial services industry, by simplifying access to a complex network of banking, payments and finances services with a focus on frictionless integration. The API layer market is a competitive one with fintechs investing heavily in API products and experiences that will differentiate their offering. Generally, lines between API businesses and other fintechs will blur, one example being Plaid and Stripe expanding into each other's turf.

Open banking could have gained a relevance similar to private API businesses. However, is typically not well suited to a dynamic competitive environment because the APIs that underpin it were designed by regulators for generic flexibility rather than by commercial operators for specific embedding use cases. This creates an obvious opportunity for an API provider to aggregate the standardized Open Banking APIs that banks that have implemented and provide an additional layer of convenience and partner experience.





# The Publicis Sapient approach to designing and scaling embedded finance propositions

To successfully design, build, and run an embedded finance business, banks need to set the direction across a set of priority areas:

- **Strategy:** Commercial objectives (e.g., growth, market share protection, diversification), target client segments, target partner landscape and partnership approach, economic model, regulatory approach
- **Customer acquisition:** Differentiating propositions for target segments, proposition co-creation model with partners, client servicing model through partners
- **Partner acquisition:** Partner-facing propositions, partner selection and acquisition approach incl. pipeline build, partner servicing model and organization
- **Platform and capability design:** Target (modular) architecture, key components to upgrade, options on what to build, buy or reuse, selection and management of the fintech ecosystem
- **Delivery model:** Multi-disciplinary DevOps teams, ‘test-and-learn’-focused product governance, interlock with further capabilities across the organization, funding models

In addressing these priorities banks face multiple challenges that can directly impact the success of the proposition they are attempting to build. Among these, failure to build a “digital first” organization for their embedded finance offering is key: an inherently digital service requires nothing less. In practice, this means that banks need to adapt to a faster cadence of digital product design, build and iteration.

Project teams should adopt the start-up approach to development, delivering a minimum viable product quickly and then iterating it after launch. This allows the team to incorporate partner and customer feedback early in the process and ensure the proposition remains relevant while it is being developed and tested.

However, as well as moving to a more agile approach to product development, banks need to recognize that the process of shaping their customer proposition in embedded finance is radically different from a traditional product development process. They are no longer designing a standardized, standalone financial product, but are instead crafting a proposition that must fit seamlessly into a customer journey through a non-financial digital environment. Banks do not have an inherent understanding of how customers consume financial products as part of a non-financial journey. To succeed they need to find out.



Equally, they need to understand the priorities of their non-financial partners so that they can offer them a compelling proposition that will support the partner's business goals. This means acquiring a detailed understanding of what each partner wants from the relationship and how the bank can best support them. Understanding this will have a direct bearing on the economic model that is chosen to underpin the relationship – how each partner extracts value from the transaction process. Banks that have experience in partner finance and third-party distribution have a head start in this area.

In our experience, banks usually fail to get their product/market fit right because they have not defined the target market clearly enough – or they are aiming at the wrong target market. This is why it is vital to appreciate the importance of moving to a new model of product development that recognizes and accommodates the needs of the different players: consumers, partners and the bank itself. This should help banks to avoid tired, “me too” propositions.

Shaping the technology architecture that will support the bank's embedded finance proposition is in part a process of deciding the balance between buy, build and reuse. But it will also depend on the bank's ability to create strong relationships with the fintech ecosystem. These are vital players in embedded finance and cannot be treated simply as suppliers: success requires commercial partnerships that deliver on everyone's priorities.

Building a digital-first organization to deliver embedded finance goes beyond the bank's approach to tech development. Banks also need a delivery model for their service that is partner and customer-centric, bringing together cross-functional teams to support the product in much the same way Silicon Valley tech companies would. This will enable effective co-ordination and help to dismantle the barriers inevitably thrown up by traditional, siloed organizational models.

The five key areas we identify all contain challenges for banks in building embedded finance propositions, but arguably the greatest is the slow speed at which many banks have traditionally designed, built, launched and iterated new products. This represents a major barrier to success because new propositions take too long to get to market and are behind the curve by the time they are ready to launch. However, projects can be delivered much faster provided banks engage constructively with the fintech ecosystem and are prepared to flex their traditional operating model.

Working with incumbents and challenger banks globally we observe typical steps for designing and launching embedded finance propositions with a fast time to market and ability to iterate:

- **Strategic planning (~three months):** Set the direction on business and operating models, target customer base, customer and partner proposition outlines, pilot partner(s), and internal capability requirements
- **MVP build (~six months):** Develop the MVP proposition with initial partners, set up the organization and operating model to sustain the MVP, outline roadmap for iterative scaling
- **Proposition scaling (nine months+):** Refine and build out the proposition based on market feedback, grow the partner base, strengthen the underlying organizational capabilities and operating model, review fintech needs and partnerships where required

**Publicis Sapient are partnering with clients in all of these activities.**



# Embedded Finance in Action

## Case Study

### Built a BaaS-first Commercial SME Bank in 9 months

From concept to fully functioning SME Bank in 9 months, Publicis Sapient developed the product vision, customer journeys and end-to-end platform design and build for this Commercial SME bank. We also developed the banks' internal systems, processes and operational frameworks and provided coaching and upskilling to transfer knowledge to our client's team helping it to become fit for scale.

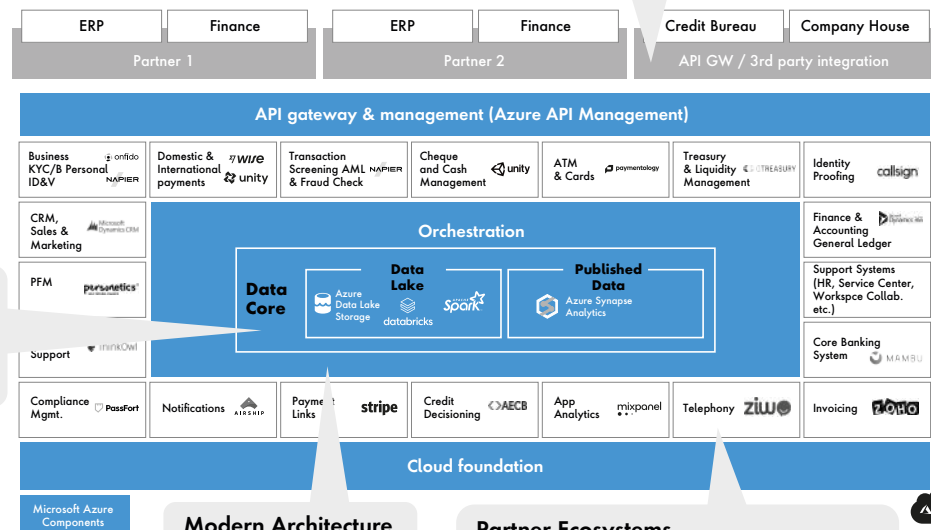
### Highlights

Targeting <b>350,000 SMEs</b>	Fully functional in <b>9 months</b>
End-to-end <b>Microsoft Azure</b> solution	Orchestrating <b>22 Fintechs</b>
Fully automated operational processes	Bespoke solutions to augment OOTB

### Platform Perspective

#### External Ecosystem driven by API

- Ready for ERP and TRS system integration
- Built with domain centric API
- Driving convenience for the partner



#### Data at the core

- Designed around data lake
- Real-time data availability
- Built for insight and analytics

#### Modern Architecture

- Event driven
- Cloud native
- Composable

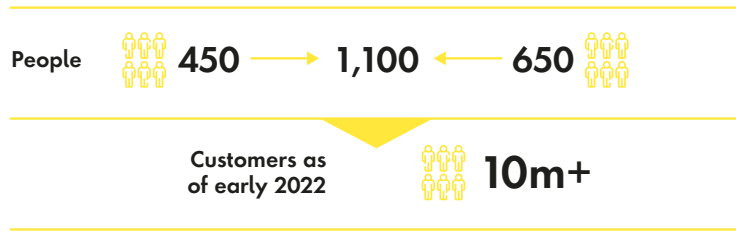
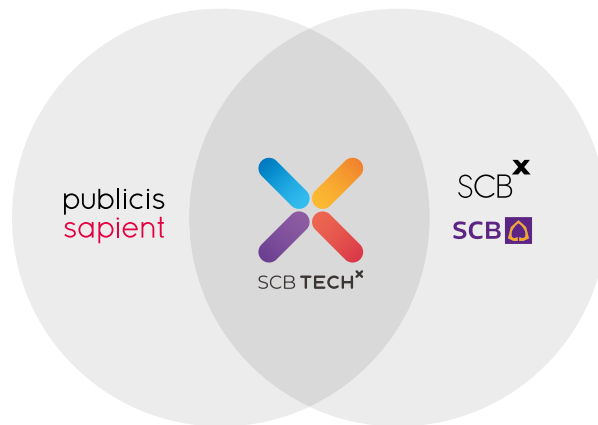
#### Partner Ecosystems

- Flexibility to swap or run multiple Fintech solutions per functional area
- True partnerships, incl. joint roadmaps
- Technology bias over today's functionality

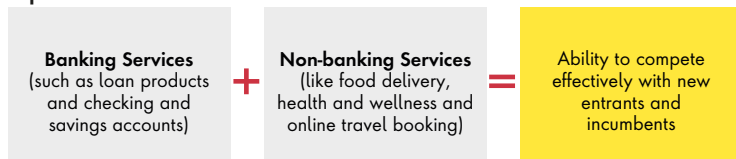
# Case Study

## Strategic Joint Venture with Siam Commercial Bank creates leading Fintech

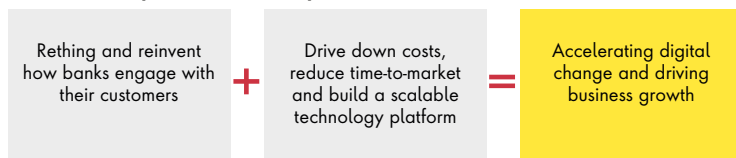
In December 2021 Publicis Sapient entered into a joint venture partnership with Siam Commercial Bank to create South East Asia's leading Fintech focused on providing banking as a service across the region. We are helping SCB develop a platform model to deliver new engagement and banking services bringing together leading digital business transformation and banking expertise to create a platform-as-a-service company SCB TechX



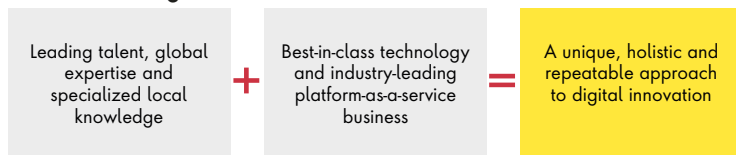
### A platform to deliver:



### Combined capabilities and experience to:



### Delivered through:



# Conclusion

Embedded finance is on course to become a much more important way for people to consume financial services. It therefore represents a key strategic issue for banks that have built their businesses on direct relationships with individual customers. Embedded finance represents a new business model in which the bank must form strong, mutually beneficial partnerships with non-financial distributors of its services and understand how it will engage with the end-customer under this model.

The product development process looks different. Banks must rethink traditional approaches and learn to develop propositions in close co-operation with both a commercial partner and that partner's customers. They must design propositions that help their partner achieve its commercial goals and must seek early feedback from beta versions of the proposition to ensure it provides a high-quality customer experience.

To achieve this, banks must rethink their delivery model and draw on the capabilities of the fintech ecosystem. This is critically important given that in building a presence in embedded finance, banks are working with partners that view the challenge chiefly from a technology perspective: how to integrate a financial product seamlessly into a non-financial customer journey. Operating in this environment places a new set of demands on banks that are quite different to those required for their traditional approach to product development.

However, even if the bank can successfully develop an embedded finance proposition with a single partner, the central challenge in building a viable business remains – how to scale and adapt the proposition to work smoothly with multiple

partners that have different commercial goals and technology platforms. Without the capability to scale an embedded finance proposition, it will never become economically viable.

To achieve this, it is essential to retain the flexibility that the modular approach to service design and development brings: in effect, banks need to become expert in “efficient customization”, able to adapt their offering to fit the needs of multiple partners, each with a distinct set of objectives and economic models.

This plays to the strengths that Publicis Sapient has gained from working on multiple embedded finance projects: the ability to provide end-to-end support for banks from shaping the strategic “north star” to defining propositions, target customer and partner segments, designing, building and launching the minimum viable product – including the underlying organization – and then scaling the proposition to multiple partners with the level of service they require. And – crucially – the ability to help banks increase the pace at which they design, build and iterate products so that they can move at the speed their commercial partners expect.





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